

EMPIRICAL ANALYSIS OF THE EFFECT OF ROA, OPERATING CASH FLOW, AND NET INCOME ON STOCK PERFORMANCE OF 10 IDX COMPANIES DURING 2021–2023

Yudha Panji Wijayanto¹, Suprihati², Rukmini³
Institut Teknologi Bisnis AAS, Indonesia
E-mail: stevehygg@gmail.com¹

Abstract: This study investigates the empirical effect of Return on Assets (ROA), Operating Cash Flow, and Net Income on Stock Returns of companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 period. The research is motivated by the phenomenon of extreme stock price volatility observed in this timeframe. The population comprises all IDX-listed firms, with purposive sampling resulting in 10 companies observed over three years. Multiple linear regression analysis was conducted using SPSS software. The results reveal that ROA has a positive and significant effect on Stock Returns, with a significance value of 0.042. In contrast, Operating Cash Flow and Net Income do not show significant effects within the model. The Adjusted R-Square value of 0.347 indicates that the independent variables explain 34.7% of the variation in Stock Returns, while the remaining proportion is influenced by other factors outside the model. These findings emphasize the importance of profitability indicators, particularly ROA, in explaining stock performance during periods of market volatility.

Keywords: *ROA, Operating Cash Flow, Net Income, Stock Returns, IDX*

Submitted: 2026-05-30; Revised: 2026-06-14; Accepted: 2026-06-20

1. Introduction

The Indonesian stock market functions as a principal venue for investors seeking to grow wealth through dividends and capital gains. Although the principal aim of equity investment is return generation, share ownership entails substantial risk because market prices fluctuate in response to firms' underlying fundamentals. This sensitivity of prices to accounting signals is well documented: (Ball & Brown, 1968) showed that accounting earnings convey information that investors use to update valuations, and (Fama, 1970) argued that markets rapidly incorporate publicly available information into prices. In this context, signaling theory further explains how firms' financial disclosures act as signals that shape investor expectations and price formation (Spence, 1973). The combined effect of these mechanisms was particularly evident on the Indonesia Stock Exchange during 2021–2023, when firm-level performance swings and macroeconomic uncertainty produced pronounced volatility in listed firms' share returns.

Observation of the ten sampled companies revealed extreme volatility in stock returns, closely tied to their fundamental conditions. In 2023, documented how PT Wijaya Karya (WIKA) experienced a drastic decline of –70.0% in stock price, which corresponded with

deteriorating fundamentals, including a net loss of IDR –7.13 trillion and negative operating cash flow of IDR –5.8 trillion. In contrast, emphasized that PT AKR Corporindo (AKRA) in 2022 achieved a positive return of 70.7%, supported by strong fundamentals such as net income of IDR 2.40 trillion and healthy operating cash flow. Similarly, PT Vale Indonesia (INCO) in 2022 recorded a 51.7% stock return, driven by a profitability ratio (ROA) of 12.5%. These contrasting cases reinforce the importance of accounting variables particularly ROA, operating cash flow, and net income in predicting stock returns, as emphasized by (Dzaironi et al., 2026) in their study of IDX firms and further supported by (Haerunnisa, 2018) in the context of Indonesian SMEs.

Return on Assets (ROA) is widely recognized as a profitability ratio that measures a company's ability to generate net income from its total assets. (Suryani et al., 2025) emphasize that a higher ROA reflects efficient asset management and stronger value creation for shareholders, whereas a low or negative ROA signals inefficiency and declining investor confidence. In addition, operating cash flow represents the firm's capacity to produce real liquidity from its core business activities. Unlike accrual-based net income, operating cash flow captures the actual cash available to meet obligations, finance investments, and distribute dividends. (Rawung et al., 2017) emphasize that persistent negative operating cash flow is often interpreted as a high-risk signal, including potential default and sustainability concerns. Net income, as the final outcome of operational activities after expenses, interest, and taxes, remains the most straightforward indicator of profitability. Consistent growth in net income strengthens investor expectations regarding dividends and long-term prospects, while declining earnings may erode confidence. This view is reinforced by (Yusuf et al., 2024), who found that net income plays a critical role in shaping investor perceptions of firm performance.

Stock return represents the rate of gain investors obtain from share ownership over a specific period and reflects the market's response to financial performance and future prospects. Recent studies confirm that profitability indicators remain central: (Paulus et al., 2026) show that ROA strengthens investor confidence in both stable and crisis conditions, while (Tohir et al., 2026) find that ROA and firm size positively influence returns in Sharia-listed companies. Similarly, (Yusuf et al., 2024) emphasize that operating cash flow and net income affect investor perceptions, though their impact is often overshadowed by profitability measures. These findings reinforce that accounting variables particularly ROA are critical in predicting stock returns in the Indonesian capital market.

The 2021–2023 window was selected as a critical post-COVID-19 transition period: 2021 captured lingering pandemic shocks, 2022 marked the recovery phase, and 2023 signaled a return toward normalization amid ongoing global headwinds. These shifting conditions produced highly heterogeneous financial outcomes across IDX-listed firms, including extreme negative values in several companies' statements that complicate empirical analysis. To address these issues, this study uses SPSS to run classical assumption tests, identify and treat outliers, and estimate multiple linear regression models that assess the effects of ROA, operating cash flow, and net income on stock returns during the recovery. Recent empirical work supports this approach: (Agustin et al., 2023) and (Yusuf et al., 2024) document the continued relevance of profitability and cash-flow signals for investor valuation in Indonesia's post-pandemic market, (Jansen, 2021) emphasizes the role of cash-flow dynamics in explaining return variation, and methodological guides such as (Brooks, 2019) recommend rigorous diagnostic testing and SPSS-based regression procedures when handling volatile financial panels.

Based on the background, this study formulates the following research questions: (1) Does ROA significantly affect stock returns of IDX-listed companies? (2) Does operating cash flow significantly affect stock returns? (3) Does net income significantly affect stock returns?

To maintain focus, this study concentrates on 10 companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 observation period. The analysis focuses on three independent variables Return on Assets (ROA), operating cash flow, and net income while stock return serves as the dependent variable. The data are derived from audited annual financial statements available on the IDX official website. The purpose of this investigation is to empirically evaluate how ROA, operating cash flow, and net income influenced stock returns of IDX-listed firms throughout the post-COVID recovery phase. (Agustin et al., 2023) highlight that profitability ratios such as ROA acted as credible signals for investors navigating pandemic-era volatility, while (Eldomiaty et al., 2024) emphasize that financial signaling became increasingly critical in explaining stock return synchronicity during the COVID-19 aftermath.

Research Gap

Previous research has examined the relationship between accounting indicators and stock returns, but much of it was conducted in relatively stable market environments or focused on individual variables in isolation. For example, (Ball & Brown, 1968) demonstrated the informational value of earnings, and subsequent studies continued to emphasize profitability measures under normal conditions. However, limited empirical evidence exists on how Return on Assets (ROA), Operating Cash Flow (OCF), and Net Income together influence stock returns during periods of heightened volatility. (Agustin et al., 2023; Dzaironi et al., 2026; Suryani et al., 2025) show that profitability ratios acted as credible signals in Indonesia's equity markets, while (Eldomiaty et al., 2024) emphasize that financial signaling became particularly critical in the aftermath of COVID-19. This gap underscores the need to investigate the simultaneous role of these accounting indicators in shaping investor behavior during the 2021–2023 post-pandemic recovery phase.

Research Contribution

This study responds directly to the identified gap by concentrating on the 2021–2023 post-COVID recovery period for firms listed on the Indonesia Stock Exchange. Unlike prior research that often are examined profitability or liquidity indicators in isolation, the present analysis integrates Return on Assets (ROA), Operating Cash Flow (OCF), and Net Income within a single multivariate regression framework. By doing so, it provides empirical evidence on which of these accounting signals most strongly predicts stock returns under volatile recovery conditions. (Agustin et al., 2023; Dzaironi et al., 2026; Suryani et al., 2025) emphasize that profitability ratios served as credible signals for investors navigating pandemic-era uncertainty, while (Eldomiaty et al., 2024) emphasize the heightened importance of financial signaling in explaining return synchronicity during the COVID-19 aftermath. Thus, the contribution is twofold: empirically, it enriches the literature with new evidence from Indonesia's recovery phase; and practically, it offers managers and investors actionable insights into which financial indicators were most valued by the market during this turbulent period.

Contribution and Novelty

This study makes the following original contributions to the literature and practice:

Contribution

Empirical contribution: This study examines Return on Assets (ROA), Operating Cash Flow (OCF), and Net Income combined as predictors of stock returns for IDX firms during the 2021–2023 post-COVID recovery. By isolating the pandemic-to-recovery transition, it emphasizes which financial signals investors valued most in a period of extreme volatility and abnormal observations. (Agustin et al., 2023; Dzaironi et al., 2026; Suryani et al., 2025) show that profitability ratios served as credible signals in Indonesia's equity markets, while percentage change in stock price over a specific period, adjusted for dividends (Margie & Habibah, 2025; Sitorus et al., 2021)

Methodological contribution: This study employs multiple linear regression analysis supported by classical assumption tests Kolmogorov–Smirnov for normality, Variance Inflation Factor (VIF) for multicollinearity, Glejser for heteroskedasticity, and Durbin–Watson for autocorrelation to ensure the validity of the model. In addition, robustness procedures such as winsorization of extreme observations and heteroskedasticity-robust standard errors are applied to mitigate the influence of abnormal values commonly found in firm financial statements during the 2021–2023 post-COVID recovery. These methodological choices are consistent with best practices in empirical accounting and finance research, as emphasized by (Rustendi, 2020) in quantitative case studies and (Brooks, 2019; Wooldridge, 2016) in modern econometric applications.

Practical implication: Practically, this study identifies Return on Assets (ROA) as the most influential accounting signal valued by investors during the volatile post-COVID recovery. By demonstrating that efficient asset utilization was consistently rewarded in the market, the findings provide actionable guidance for managers aiming to strengthen profitability strategies and for investors seeking reliable indicators of firm resilience. (Agustin et al., 2023)) emphasize the signaling role of profitability ratios in Indonesia's equity markets, while (Fama & French, 1992) provide foundational evidence that profitability measures explain cross-sectional differences in returns. More recently, (Fauziya et al., 2024; Shiyammurti et al., 2020) show that ROA maintained a significant positive effect on stock prices both before and during the COVID-19 pandemic, reinforcing its relevance as a practical benchmark for investment decisions in uncertain conditions.

Theoretically, this study adds evidence on how fundamental indicators Return on Assets (ROA), Operating Cash Flow (OCF), and Net Income shape Stock Returns, supporting models of investor behavior and price dynamics. Practically, the findings guide managers in improving asset use, cash flow, and profitability strategies, while helping investors identify the most relevant signals for rational decision-making. (Agustin et al., 2023; Dzaironi et al., 2026; Suryani et al., 2025) emphasized the signaling role of profitability ratios in Indonesia's equity markets, and (Fauziya et al., 2024; Shiyammurti et al., 2020) document the impact of the COVID-19 pandemic on the IDX, reinforcing the importance of financial resilience in recovery conditions.

Novelty of the Study

The novelty of this study lies in identifying Return on Assets (ROA) as the dominant predictor of stock returns during Indonesia's post-COVID recovery period (2021–2023). Unlike earlier research conducted under stable market conditions, this study isolates the pandemic to recovery transition and demonstrates how profitability efficiency became the most valued signal for investors amid heightened volatility. (Agustin et al., 2023; Dzaironi et al., 2026; Suryani et al., 2025) confirm the signaling role of profitability ratios in Indonesia's equity

markets, while (Fauziya et al., 2024; Shiyammurti et al., 2020) document the impact of the COVID-19 pandemic on the Indonesia Stock Exchange, reinforcing the relevance of focusing on this unique recovery window.

2. Literature Review

2.1 Foundation

Several theories underpin the examination of the relationship between accounting indicators and stock returns. Signaling theory posits that financial information disclosed in company reports functions as signals to reduce information asymmetry between managers and investors. Positive signals such as rising ROA, strong operating cash flow, or consistent net income growth tend to enhance investor confidence, while negative signals erode market trust and may trigger declining stock prices. In this context, transparency and credibility in financial reporting become critical determinants of investor decision-making. Recent studies reinforce this perspective: (Agustin et al., 2023; Dzaironi et al., 2026) emphasize the signaling role of profitability ratios in Indonesia's equity markets, (Eldomiatty et al., 2024) emphasize the importance of financial signaling in explaining return synchronicity after COVID-19, (Paulus et al., 2026) examine shifts in investor interpretation of accounting signals across stable and crisis conditions, and (Muhammad Rofi'i, 2026) provides evidence that liquidity and profitability indicators were interpreted differently by investors during the COVID-19 era. Together, these findings underscore the relevance of signaling theory in understanding investor behavior under heightened volatility.

2.2 Market Efficiency

Market efficiency theory reinforces the view that stock prices incorporate all available information. In its semi-strong form, markets respond rapidly to public disclosures such as audited financial statements, meaning that fundamental variables including profitability ratios, operating cash flow, and net income are quickly reflected in stock valuations. This suggests that accounting information plays a central role in driving market value. Classic studies such as (Fama, 1970) and (Michael Bromwich, 1977) established the theoretical foundation, while more recent evidence from (Roqijah et al., 2022) and (Apriwandi et al., 2021) demonstrates that accounting data remained critical in explaining stock returns in Indonesia during the COVID-19 pandemic. (Ryan Hasianda Pasaribu, 2022) further confirms that the Indonesian capital market exhibited efficiency characteristics both before and during the pandemic, underscoring the relevance of accounting signals in volatile conditions.

2.3 Profitability

Profitability theory emphasizes a firm's ability to generate earnings from its resources is a central measure of performance. Return on Assets (ROA), as a key profitability ratio, reflects how efficiently assets are utilized to produce net income. A higher ROA signals effective management practices and stronger value creation, which in turn attracts investors and enhances firm performance in the capital market. Recent studies reinforce this view (Liu et al., 2023) emphasize ROA's role in explaining firm value, (Roqijah et al., 2022) confirm its positive effect on stock returns in Indonesian markets, and (Taufik Akbar et al., 2025) provide evidence that profitability efficiency remains a dominant determinant of investor confidence during volatile conditions. Complementing these findings, (Fauziya et al., 2024) show that profitability indicators continued to influence stock prices before and during the COVID-19 pandemic, underscoring ROA's relevance in crisis and recovery contexts.

2.4 Cash Flow

Cash flow theory emphasizes that operating cash flow represents the real liquidity generated from a firm's core business activities. Unlike accrual-based earnings, cash flow is harder to manipulate and provides investors with a more reliable signal of a company's ability to meet obligations, finance investments, and distribute dividends. Strong operating cash flow enhances investor trust and supports stock return stability, while weak or negative cash flow raises concerns about sustainability and long-term value. Empirical studies confirm this role: (Dechow, 1994) showed that cash flows complement earnings in assessing firm performance, (Roqijah et al., 2022) found operating cash flow significantly influences stock returns in Indonesian firms, and (Fauziya et al., 2024) demonstrated that cash flow indicators remained critical for investor confidence before and during the COVID-19 pandemic.

2.5 Income

Income theory positions net income as a fundamental indicator of managerial effectiveness in creating shareholder value. Sustained growth in net income strengthens investor expectations regarding dividend distribution and long-term prospects while declining or negative earnings often signal operational inefficiency, erode investor confidence, and reduce firm valuation in the capital market. Foundational studies such as (Ball & Brown, 1968; Lev, 1989) and (Dechow, 1994) established the role of earnings in explaining investor reactions, while more recent evidence from (Fauziya et al., 2024) and (Suryani et al., 2025) confirms that net income remained a critical determinant of stock price movements in Indonesia before, during, and after the COVID-19 pandemic, reinforcing its relevance in volatile recovery conditions.

Hypotheses

H1: Return on Assets (ROA, X1) ROA is hypothesized to have a positive and significant effect on Stock Returns (Y1). A higher ROA indicates that the company is more efficient in utilizing its assets to generate net income. This efficiency strengthens investor confidence, as it reflects effective management and sustainable profitability. Consequently, firms with higher ROA are expected to experience increased demand for their shares, leading to higher stock returns.

H2: Operating Cash Flow (X2) Operating Cash Flow is hypothesized to have a positive and significant effect on Stock Returns (Y1). Positive operating cash flow demonstrates real liquidity and the company's ability to finance daily operations, invest in growth, and distribute dividends. Investors often perceive strong cash flow as a signal of financial stability and resilience, particularly during periods of economic uncertainty. Therefore, firms with consistently positive operating cash flow are expected to attract investor interest and achieve higher stock returns.

H3: Net Income (X3) Net Income is hypothesized to have a positive and significant effect on Stock Returns (Y1). Consistent growth in net income serves as a signal of managerial success and operational efficiency. It reinforces investor expectations regarding dividend distribution and long-term prospects. Companies that report stable or increasing net income are generally perceived as financially sound, which enhances market confidence and contributes to rising stock returns.

Y1: Stock Return, Stock Return is the primary dependent variable in this study. It represents the gain or loss obtained by investors from holding shares over a specific period, reflecting the market's response to a company's financial performance and future outlook.

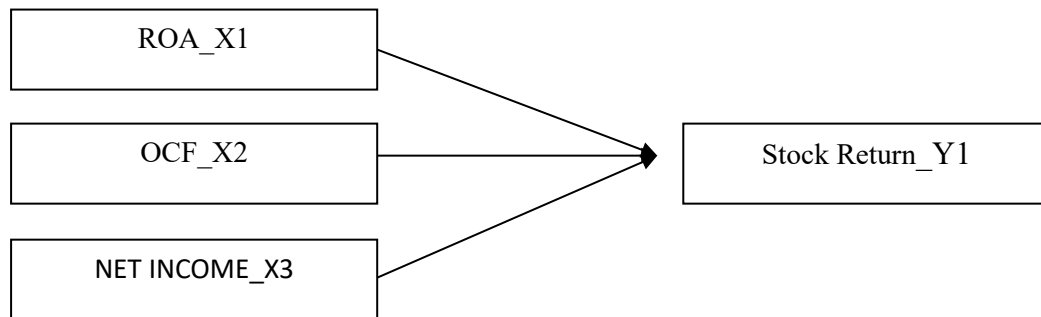


Figure 1. Framework

3. Research Method

This study adopts a quantitative explanatory research design to empirically test the effects of Return on Assets (ROA), operating cash flow, and net income on stock returns of companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 period. The quantitative approach is appropriate because the analysis relies on numerical data derived from audited financial statements, which can be statistically examined to identify causal relationships. Multiple linear regression serves as the primary analytical tool, supported by classical assumption tests and robustness procedures to ensure validity. This methodological framework is consistent with (Gujarati, 2009) and (Wooldridge, 2016), while recent applications in Indonesian capital market research (Apriwandi et al., 2021; Fauziya et al., 2024; Roqijah et al., 2022) confirm the relevance of regression-based approaches in examining accounting indicators and stock returns under volatile post-COVID conditions.

The population of this study comprises all companies listed on the Indonesia Stock Exchange (IDX) during the observation period. From this population, a purposive sample of 10 companies was selected based on the following criteria: (1) consistent publication of audited annual financial statements during 2021–2023, (2) availability of complete data on ROA, operating cash flow, and net income, and (3) active trading of shares on the IDX. Purposive sampling was chosen to ensure that the selected firms provide reliable and comparable data for empirical testing (Sekaran & Bougie, 2016)

The study employs secondary quantitative data obtained from audited annual reports published on the IDX official website (IDX, 2023) The variables are defined operationally as follows: Return on Assets ROA(X1) represents profitability efficiency, measured by net income divided by total assets (Kothari, 2001) OCF(X2) reflects real liquidity generated from core business activities (Dechow, 1994) Net Income(X3) indicates overall profitability after expenses, interest, and taxes (Lev, 1989) and Stock Return(Y1) is the dependent variable, measured as the percentage change in stock price over a specific period, adjusted for dividends (Margie & Habibah, 2025; Sitorus et al., 2021).

Data collection was carried out using the documentation method, by retrieving audited financial statements from the official IDX database. The collected data were tabulated with Microsoft Excel to ensure accuracy and consistency, and subsequently analyzed using IBM SPSS Statistics 26. Multiple linear regression was employed to examine the effects of the independent variables ROA(X1), OCF(X2), and Net Income(X3) on Stock Returns(Y1). This approach is consistent with established econometric practices in finance and accounting research (Brooks, 2019; Gujarati, 2009; Wooldridge, 2016) and has been widely applied in empirical studies of the Indonesian capital market (Fauziya et al., 2024; Roqijah et al., 2022)

To ensure the validity of the regression model, several classical assumption tests were conducted: the Kolmogorov–Smirnov test for normality, Variance Inflation Factor (VIF) for multicollinearity, the Glejser test and scatterplot analysis for heteroskedasticity, and the Durbin–Watson statistic for autocorrelation. Hypothesis testing was then performed using the t-test to examine the individual effect of each independent variable, the F-test to assess the joint effect of all independent variables, and the coefficient of determination (R^2) to measure the explanatory power of the model. This methodological framework ensures that the analysis is rigorous, reliable, and aligned with established standards in accounting and finance research (Brooks, 2019; Ghozali Imam, 2021; Rustendi, 2020).

4. Result and Discussion

4.1 Results

Descriptive Statistics

The descriptive statistical analysis presents measures of central tendency and dispersion. Based on the results, the number of valid observations (N) is 30. Stock Return (Y) shows a minimum value of -70.00 and a maximum of 70.73 , with a mean of -7.8010 . This indicates that, on average, firms experienced negative returns during the observation period. The high standard deviation (30.47) reflects strong volatility and the presence of extreme cases, thereby justifying the need for a normality test.

Table 2. Descriptive Statistics – IBM SPSS

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Y_StockReturn	30	-70.00	70.73	-78.010	3.046.654
X1_ROA	30	-10.50	12.80	56.500	511.620
X2_OCF	30	-5800.00	9500.00	35.530.000	321.160.627
X3_NetIncome	30	-7120.00	5600.00	23.166.167	230.928.474
Valid N (listwise)	30				

Classical Assumption Tests

Normality Test (Kolmogorov–Smirnov)

Criteria: If the significance value > 0.05 , the data are normally distributed; if < 0.05 , the data are not normally distributed.

Result: The Kolmogorov–Smirnov test produced an Asymp. Sig. (2-tailed) of 0.106 , which is greater than 0.05 . Thus, the residuals are normally distributed, and the regression model does not suffer from normality issues.

Table 3. Normality Test (Kolmogorov Smirnov) – IBM SPSS

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		30
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	2.331.362.845
Most Extreme Differences	Absolute	.145
	Positive	.145
	Negative	-.082
Test Statistic		.145
Asymp. Sig. (2-tailed)		.106 ^c

Multicollinearity Test

Criteria: If tolerance > 0.10 and VIF < 10, there is no multicollinearity.

Result: All independent variables have tolerance values above 0.10 and VIF values below 10 (ROA = 1.801; Operating Cash Flow = 2.466; Net Income = 3.410). Therefore, the model is free from multicollinearity problems

Table 4. Multicollinearity Test – IBM SPSS

Coefficients ^a		Collinearity Statistics	
Model		Tolerance	VIF
1	X1_ROA	.555	1.801
	X2_OCF	.406	2.466
	X3_NetIncome	.293	3.410

Heteroskedasticity Test

Criteria: If the significance value > 0.05, heteroskedasticity is absent. Result: The Glejser test shows significance values of ROA (0.912), Operating Cash Flow (0.908), and Net Income (0.362), all greater than 0.05. This indicates that the regression model does not experience heteroskedasticity.

Table 5. Heteroskedasticity Test - IBM SPSS

Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	11.997	4.757		2.522	.018
	X1_ROA	.086	.768	.028	.112	.912
	X2_OCF	.000	.001	-.034	-.117	.908
	X3_NetIncome	.002	.002	.319	.928	.362

Autocorrelation Test

Criteria: Durbin–Watson (DW) values range between 0–4. If DW lies between dU and (4–dU), there is no autocorrelation.

Result: The DW statistic is 2.332, which falls within the acceptable range. Therefore, the regression model does not suffer from autocorrelation.

Table 6. Autocorrelation Test - IBM SPSS

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.644 ^a	.414	.347	2.462.194	2.332

a. Predictors: (Constant), X3_NetIncome, X1_ROA, X2_OCF

b. Dependent Variable: Y_StockReturn

Multiple Linear Regression Analysis

The regression analysis shows that the constant (B) is –30.056, meaning that when all independent variables are zero, the predicted stock return is –30.056%. ROA has a coefficient of 2.786 with a significance value of 0.028 (<0.05), indicating a positive and significant effect on stock returns. Operating Cash Flow and Net Income, however, have significance values of 0.855 and 0.355 respectively (>0.05), showing no significant effect.

Table 7. Multiple Linear Regression Analysis – IBM SPSS

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-30.056	7.424		-4.048	.000
	X1_ROA	2.786	1.199	.468	2.322	.028
	X2_OCF	.000	.002	-.044	-.185	.855
	X3_NetIncome	.003	.004	.261	.943	.355

Model Feasibility Test (F-Test)

Criteria: If the significance value < 0.05, the regression model is feasible.

Result: The F-test produces a value of 6.134 with a significance of 0.003 (<0.05). This confirms that the regression model is statistically feasible and can be used to predict stock returns.

Table 8. Model Feasibility Test (F-Test) – IBM SPSS

ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.155.857	3	3.718.619	6.134	.003 ^b
	Residual	15.762.233	26	606.240		
	Total	26.918.090	29			

a. Dependent Variable: Y_StockReturn

b. Predictors: (Constant), X3_NetIncome, X1_ROA, X2_OCF

Partial Test (t-Test)

Criteria: If the significance value < 0.05, the independent variable significantly affects the dependent variable.

Result: ROA has a significance value of 0.028 (<0.05), indicating a positive and significant effect on stock returns. Operating Cash Flow (0.855) and Net Income (0.355) are not significant.

Table 9. Partial Test (t-Test) – IBM SPSS

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-30.056	7.424		-4.048	.000
	X1_ROA	2.786	1.199	.468	2.322	.028
	X2_OCF	.000	.002	-.044	-.185	.855
	X3_NetIncome	.003	.004	.261	.943	.355

a. Dependent Variable: Y_StockReturn

Coefficient of Determination (R²)

Criteria: R² values range from 0–1. A higher value indicates stronger explanatory power.

Result: The adjusted R² value is 0.347, meaning that ROA, Operating Cash Flow, and Net Income together explain 34.7% of the variation in stock returns. The remaining 65.3% is influenced by other factors outside the model, such as macroeconomic conditions, government policies, and investor sentiment.

Table 10. Coefficient of Determination (R²) – IBM SPSS

Model Summary^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.644 ^a	.414	.347	2.462.194	2.332

a. Predictors: (Constant), X3_NetIncome, X1_ROA, X2_OCF
b. Dependent Variable: Y_StockReturn

4.2 Discussion

Return on Assets (ROA)

The regression results demonstrate that Return on Assets (ROA) exerts a positive and significant influence on stock returns. This finding suggests that efficient asset utilization enhances profitability and strengthens investor confidence, as firms with higher ROA are perceived as more stable and attractive in the capital market. These results align with prior studies that emphasize profitability as a critical determinant of market valuation and reinforce both Profitability Theory and Signaling Theory, where ROA serves as a credible signal of future performance (Aurelia Pawulandari & Nurasik Nurasik, 2024; Munadjat et al., 2026; Taufik Akbar et al., 2025).

Operating Cash Flow (OCF)

In contrast, operating cash flow does not exhibit a significant effect on stock returns. Although cash flow reflects liquidity and operational sustainability, investors in the post-pandemic period appeared to prioritize profitability indicators over short-term liquidity measures. This outcome is consistent with prior findings that cash flow information is often secondary to profitability metrics in investor analysis. Likewise, other studies note that during periods of heightened uncertainty, liquidity signals tend to be overshadowed by broader concerns about long-term sustainability. The insignificance of cash flow in this study therefore reflects investor preference for profitability-based measures when market conditions are volatile (Barth et al., 1999; Dechow, 1994).

Net Income

Net income was found to be statistically insignificant in predicting stock returns. Although net income is traditionally regarded as a straightforward measure of profitability, its limited impact in this study suggests that investors may discount accounting earnings when external factors—such as macroeconomic volatility, government policies, and market sentiment—play a more dominant role. This finding is consistent with prior evidence showing that net income alone is insufficient to explain variations in stock returns, particularly among firms facing uncertainty. It also resonates with studies that argue accounting earnings lose predictive power when broader market conditions overshadow firm-level performance (Ball & Brown, 1968; Collins et al., 1997; Kothari, 2001).

Overall Implications

Overall, the findings underscore that Return on Assets (ROA) is the most reliable accounting indicator for predicting stock returns in the Indonesian capital market during the 2021–2023 period, while operating cash flow and net income played more limited roles. The adjusted R² value of 34.7% suggests that although firm level profitability is an important driver of investor confidence, external factors such as macroeconomic conditions, government

policies, and market sentiment continue to exert substantial influence on stock performance. This reinforces the perspective that in emerging markets, broader economic and regulatory environments strongly shape investor behavior (Anginer et al., 2013; Geert Bakaert & Campbell R. Harvey, 1997; Munadjat et al., 2026).

5. Conclusion

Based on the empirical analysis of 10 IDX-listed companies during the 2021–2023 period, several conclusions can be drawn:

Return on Assets (ROA) has a positive and significant effect on stock returns. This confirms that profitability efficiency is the most relevant accounting indicator for predicting market performance.

Operating Cash Flow does not significantly affect stock returns. Investors appear to prioritize profitability over liquidity during periods of economic volatility.

Net Income also does not significantly affect stock returns, suggesting that accounting earnings alone are insufficient as a predictive signal when external factors dominate market sentiment.

The regression model is statistically feasible, with an adjusted R^2 of 34.7%, indicating that the independent variables moderately explain variations in stock returns, while the remaining proportion is influenced by external macroeconomic and market factors.

These findings emphasize the dominance of profitability indicators, particularly ROA, in shaping investor confidence during the post-COVID transition period.

Limitations

This study has several limitations:

The sample size is limited to 10 companies, which restricts generalization across all IDX-listed firms.

The independent variables are limited to ROA, operating cash flow, and net income, while other financial and macroeconomic factors were not included.

The research period covers only 2021–2023, which may not capture long-term trends in the capital market.

Recommendations

For future researchers: It is recommended to expand the sample size and include additional variables such as Return on Equity (ROE), Debt to Equity Ratio (DER), and Earnings per Share (EPS), as well as macroeconomic indicators, to provide a more comprehensive analysis.

For company management: Firms should focus on improving asset utilization efficiency to maintain high ROA, as this has been proven to significantly influence investor confidence and stock performance.

For investors: Profitability indicators, particularly ROA, should be prioritized in investment decision-making. However, investors must also consider external factors such as economic conditions, government policies, and market sentiment to form a balanced strategy.

Acknowledgement

The author would like to express sincere gratitude to *Institut Teknologi dan Bisnis AAS Indonesia* for academic guidance and support throughout the preparation of this research. Special appreciation is extended to *Dr. Suprihati, MM* and *Dra. Rukmini, MM*, as academic advisors, for their invaluable direction, constructive feedback, and encouragement during the

completion of this study. Their guidance has been instrumental in shaping the quality and academic rigor of this work.

References

- Agustin, R., Nurcahyono, N., Sinarasri, A., & Sukesti, F. (2023). *Financial Ratio and Stock Returns in Indonesia Equity Markets: A Signaling Theory Approach*. 277–292. https://doi.org/10.2991/978-94-6463-154-8_25
- Anginer, D., Demirguc-Kunt, A., Huizinga, H., & Ma, K. (2013). How Does Corporate Governance Affect Bank Capitalization Strategies? *How Does Corporate Governance Affect Bank Capitalization Strategies?* <https://doi.org/10.1596/1813-9450-6636>
- Apriwandi, I. D., Meisa, N., Andriani, N., Priscilia, E. Y., & Dewi, L. L. (2021). Financial Market Data Versus Accounting Data: Persistent Patterns in Explaining Stock Returns in the Indonesian Capital Market During the Covid-19 Pandemic. *Rigeo*, 11(5). <https://rigeo.org/menu-script/index.php/rigeo/article/view/1169>
- Aurelia Pawulandari, & Nurasik Nurasik. (2024). *Return on Assets, Return on Equity, and Net Profit Margin Affect Stock Prices in Indonesia*. <https://ijler.umsida.ac.id/index.php/ijler/article/view/1237>
- Ball, R., & Brown, P. (1968). An Empirical Evaluation of Accounting Income Numbers. *Journal of Accounting Research*, 6(2), 159. <https://doi.org/10.2307/2490232>
- Barth, M. E., Cram, D. P., & Nelson, K. K. (1999). Accruals and the Prediction of Future Cash Flows. *SSRN Electronic Journal*. <https://doi.org/10.2139/SSRN.194931>
- Brooks, C. (2019). Introductory Econometrics for Finance, FOURTH EDITION. *Introductory Econometrics for Finance, Fourth Edition*, 1–696. <https://doi.org/10.1017/9781108524872>
- Collins, D. W., Maydew, E. L., & Weiss, I. S. (1997). Changes in the value-relevance of earnings and book values over the past forty years. *Journal of Accounting and Economics*, 24(1), 39–67. <https://ideas.repec.org/a/eee/jaecon/v24y1997i1p39-67.html>
- Dechow, P. M. (1994). Accounting earnings and cash flows as measures of firm performance: The role of accounting accruals. *Journal of Accounting and Economics*, 18(1), 3–42. [https://doi.org/10.1016/0165-4101\(94\)90016-7](https://doi.org/10.1016/0165-4101(94)90016-7)
- Dzaironi, M., Permata, L. T., & Pebriani, R. A. (2026). The Effect of Profitability, Operating Cash Flow, and Market Value on Stock Return with Company Size as a Moderation: A Study of Companies Listed on the IDX 30 Index (Period 2021–2023). *Golden Ratio of Finance Management*, 6(1), 195–212. <https://doi.org/10.52970/GRFM.V6I1.1825>
- Eldomiaty, T., Azzam, I., Afifi, K. T. H., & Rashwan, M. H. (2024). An Alignment of Financial Signaling and Stock Return Synchronicity. *Journal of Risk and Financial Management 2024*, Vol. 17, Page 162, 17(4), 162. <https://doi.org/10.3390/JRFM17040162>
- Fama, E. F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *The Journal of Finance*, 25(2), 383. <https://doi.org/10.2307/2325486>
- Fama, E. F., & French, K. R. (1992). The Cross-Section of Expected Stock Returns. *The Journal of Finance*, 47(2), 427. <https://doi.org/10.2307/2329112>
- Fauziya, A. N., Jamilah, I. K., Novitasari, B. T., & Riantika, R. L. (2024). Financial performance of Indonesia's consumer goods companies before and during the

- Covid-19 Pandemic. *Journal of Contemporary Accounting*, 180–190.
<https://doi.org/10.20885/jca.vol5.iss3.art5>
- Geert Bakaert, & Campbell R. Harvey. (1997). *Emerging Equity Market Volatility*.
<https://ideas.repec.org/a/eee/jfinec/v43y1997i1p29-77.html>
- Ghozali Imam. (2021). Application of Multivariate Analysis with the SPSS 26 Program. *Badan Penerbit Universitas Diponegoro*, 506.
- Gujarati, D. N. , P. D. C. (2009). *Basic Econometrics. 5th Edition, McGraw Hill Inc., New York. - References - Scientific Research Publishing*.
<https://www.scirp.org/reference/referencespapers?referenceid=1568730>
- Haerunnisa, W. , & A. F. (2018). *Analysis of Accounting Practices in Micro, Small, and Medium Enterprises (MSMEs)*.
- IDX. (2023). *Yearly Annual Report*. www.idx.co.id
- Jansen, B. A. (2021). Cash flow growth and stock returns. *Journal of Financial Research*, 44(2), 371–402. <https://doi.org/10.1111/JFIR.12244>
- Kothari, S. P. (2001). Capital Markets Research in Accounting. *SSRN Electronic Journal*.
<https://doi.org/10.2139/SSRN.235798>
- Lev, B. (1989). On the Usefulness of Earnings and Earnings Research: Lessons and Directions from Two Decades of Empirical Research. *Journal of Accounting Research*, 27, 153. <https://doi.org/10.2307/2491070>
- Liu, Y., Yang, B., & Su, Y. (2023). Changes in firm profitability, heterogeneous investor beliefs, and stock returns. *Journal of Management Science and Engineering*, 8(2), 258–272. <https://doi.org/10.1016/J.JMSE.2022.10.004>
- Margie, L. A., & Habibah, H. (2025). Impact of Operating Cash Flow and ROA on Stock Returns in LQ 45 Companies in Period 2018-2023. *Golden Ratio of Finance Management*, 5(2), 435–444. <https://doi.org/10.52970/GRFM.V5I2.1267>
- Michael Bromwich. (1977). *The Use of Present Value Valuation Models in Published Accounting*. The Accounting Review.
<https://www.jstor.org/stable/246078?seq=1>
- Muhammad Rofi'i. (2026). *View of Stock Return Behavior and Its Fundamental Determinants: An Empirical Study in the COVID-19 Era*. <https://jurnal.stie-aas.ac.id/index.php/jie/article/view/19160/8158>
- Munadjat, B., Gursida, H., & Indrayono, Y. (2026). Determinants of Stock Returns: Evidence from Indonesian Listed Companies (2019–2024). *International Journal of Management and Business Intelligence*, 4(2), 289–300.
<https://doi.org/10.59890/IJMBI.V4I2.396>
- Paulus, H., Tarmidi, D., Paulus, H., & Tarmidi, D. (2026). Signalling Theory and Stock Returns: A Pre- and Post-Pandemic Comparison. *JABI (Jurnal Akuntansi Berkelanjutan Indonesia)*, 9(1), 1–22.
<https://doi.org/10.32493/JABI.V9I1.Y2026.P1-22>
- Rawung, F., Rawung, F. E., Alexander, S. W., & Kalalo, M. Y. B. (2017). The Effect of Operating Cash Flow and Return on Assets (ROA) on Stock Prices: A Study of Banking Companies Listed on the Indonesia Stock Exchange. *GOING CONCERN: JURNAL RISET AKUNTANSI*, 12(01), 29–41.
<https://doi.org/10.32400/gc.12.01.17134.2017>
- Roqijah, I., Nugroho, W. S., & Nurcahyono, N. (2022). The Effect of Profitability, Operating cash flow, Economic Value Added and Firm Size on Stock Return. *MAKSIMUM:*

- Media Akuntansi Universitas Muhammadiyah Semarang*, 12(2), 164–174.
<https://doi.org/10.26714/MKI.12.2.2022.164-174>
- Rustendi, T. (2020). *Quantitative Approach in Case Studies of Accounting Research*. 145–160.
- Ryan Hasianda Pasaribu. (2022). A Study on the Weak-Form Efficiency of the Capital Market in the Indonesia Stock Exchange Before and During the COVID-19 Pandemic. *Jurnal Ekonomi Dan Manajemen*, 1(2), 90–101.
<https://doi.org/10.56127/JEKMA.V1I2.210>
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business A Skill-Building Approach. 7th Edition*, Wiley & Sons, West Sussex.
<https://www.scirp.org/reference/referencespapers?referenceid=2371540>
- Shiyammurti, N. R., Saputri, D. A., & Syafira, E. (2020). The Impact of the COVID-19 Pandemic on the Indonesia Stock Exchange (IDX). In *Journal of Accounting Taxing and Auditing (JATA) E-ISSN* (Vol. 1, Number 1).
- Sitorus, J. S., Siburian, E. B., Simbolon, Y., & Enjelia Br Naibaho, R. (2021). The Effect of Operating Cash Flow, Net Profit, ROA, and ROE on Stock Return of IDX. *Jurnal Akuntansi*, 11(2), 189–196. <https://doi.org/10.33369/J.AKUNTANSI.11.2.189-196>
- Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics*, 87(3), 355–374.
<https://doi.org/10.2307/1882010>
- Suryani, F., Karo, D. B., Siregar, H. A., & Irawati, I. (2025). The Effect of Current Ratio, Return on Assets, Debt to Asset Ratio, Earnings per Share, and Total Asset Turnover on Stock Prices in Infrastructure Sector Companies Listed on the Indonesia Stock Exchange During 2019–2023. *Bilancia: Jurnal Ilmiah Akuntansi*, 9(4), 441–451. <https://doi.org/10.35145/BILANCIA.V9I4.5725>
- Taufik Akbar, R., Wulandari, R., Rizki, M. I., Manajemen, M., & Widyatama, U. (2025). The Influence of Profitability on Stock Prices in the Financing Sector Companies Listed on the Indonesia Stock Exchange. *Journal of Advances in Accounting, Economics, and Management*, 3(1), 8–8.
<https://doi.org/10.47134/AAEM.V3I1.828>
- Tohir, M., Indrayono, Y., & Martanti, R. (2026). Analysis of the Influence of Profitability and Company Size on Stock Returns of Indonesian Sharia Stock Index Companies. *International Journal of Contemporary Sciences (IJCS)*, 4(3), 1151–1166.
<https://doi.org/10.55927/DNHAA755>
- Wooldridge, J. M. (2016). *Introductory Econometrics. A Modern Approach (6th ed.)*. Cengage Learning.
<https://www.scirp.org/reference/referencespapers?referenceid=3086091>
- Yusuf, S., Akib, M., Ode, L., & Hazmil, F. (2024). The Effect of Operating Cash Flow and Net Income on Stock Returns in Companies Listed in the Kompas100 Index. *Jurnal Akuntansi Dan Keuangan*, 09, 2503–1635. <https://doi.org/10.33772/jakuho.v9i2>